**DESCRIPTION**

**Species Reactivity** Mouse

**Specificity** Detects mouse Podocalyxin in direct ELISAs and Western blots.

**Source** Monoclonal Rat IgG2B Clone # 192703

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** Mouse myeloma cell line NS0-derived recombinant mouse Podocalyxin Ser21-Arg402

**Accession #** Q9R0M4

**Formulation** Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**APPLICATIONS**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>1 µg/mL Recombinant Mouse Podocalyxin</td>
</tr>
<tr>
<td>Flow Cytometry</td>
<td>2.5 µg/10^6 cells D3 mouse embryonic stem cell line</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>8-25 µg/mL See Below</td>
</tr>
<tr>
<td>Immunohistochemistry</td>
<td>1-25 µg/mL See Below</td>
</tr>
</tbody>
</table>

**CyTOF-ready** Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

**DATA**

**Immunocytochemistry**

Podocalyxin in bEnd.3 Mouse Cell Line. Podocalyxin was detected in immersion fixed bEnd.3 mouse endothelioma cell line using 10 µg/mL Rat Anti-Mouse Podocalyxin Monoclonal Antibody (Catalog # MAB1556) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

**Immunohistochemistry**

Podocalyxin in Mouse Kidney Tissue. Podocalyxin was detected in perfusion fixed frozen sections of mouse kidney tissue using Rat Anti-Mouse Podocalyxin Monoclonal Antibody (Catalog # MAB1556) at 1.7 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Rat IgG VisUCyte™ HRP Polymer Antibody (brown; Catalog # VC005) and counterstained with hematoxylin (blue). Specific staining was localized to glomeruli. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

**PREPARATION AND STORAGE**

- **Reconstitution**: Reconstitute at 0.5 mg/mL in sterile PBS.
- **Shipping**: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.
- **Stability & Storage**
  - 12 months from date of receipt, -20 to -70 °C as supplied.
  - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
  - 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Podocalyxin, also known as Podocalyxin-like protein-1 (PCLP1 or PODXL), is a type I transmembrane glycoprotein. It belongs to the CD34/Podocalyxin family of sialomucins that share structural similarity and sequence homology. Podocalyxin is a major sialoprotein in the podocytes of the kidney glomerulus and is also expressed by both endothelium and multipotent hematopoietic progenitors. It has been identified as a novel cell surface marker for hemangioblasts, the common precursors of hematopoietic and endothelial cells (1, 2).

**References:**